

CLAIMS

1. A female terminal for receiving and mating with a male terminal of the type having at least one flat surface extending longitudinally along the male terminal, said female terminal comprising:

a terminal body with a mating end and a circuit connecting end;

5 a terminal receiving passageway defined in the mating end including two spaced apart sidewalls extending lengthwise along the passageway; and

at least one inwardly projecting contact disposed along one of said sidewalls, said at least one inwardly projecting contact area having a flat contacting surface disposed at an angle to said at least one sidewall for engaging said at least one flat surface of the male terminal when the male terminal is inserted into the terminal receiving passageway;

10 said sidewalls resiliently flexing away from each other when the male terminal is inserted into said passageway;

whereby said flat contacting surface of said at least one inwardly projecting contact area is in generally coplanar contacting relationship with said at least one flat surface of the male terminal.

2. The female terminal as claimed in accordance with claim 1 wherein an inwardly projecting contact area with a flat contacting surface is disposed on each of said two spaced apart sidewalls, each of said inwardly projecting contacts are disposed at an angle to their respective sidewall for engaging opposite flat surfaces of said male terminal when the male terminal is inserted into said passageway, and said flat contacting surfaces of the inwardly projecting contacts are in coplanar contacting relationship with the opposing flat surfaces of the male terminal when the male terminal is inserted in the passageway.

3. The female terminal as claimed in accordance with claim 1 wherein each of said sidewalls is of generally U-shaped cross section wherein the legs of the U-shaped cross sections are spaced apart from each other.

4. The female terminal as claimed in accordance with claim 3 wherein said U-shaped cross sections of the sidewalls are formed by cutting a slit in opposite sidewalls of the female terminal lengthwise along the terminal receiving passageway.

5. The female terminal as claimed in accordance with claim 4 wherein said U-shaped cross sections of the sidewalls of the female terminal flex upon insertion of the male terminal into the passageway and upon engagement between the male terminal and the flat contacting surfaces of the inwardly projecting contacts, said sidewalls providing normal forces at the flat contacting surfaces against the flat surfaces of the male terminal to provide electrical contact between the male and female terminals.

6. The female terminal as claimed in accordance with claim 1 wherein said sidewalls flex about an axis generally parallel to a respective sidewall and in a direction perpendicular to the terminal receiving passageway when said male terminal is inserted into said passageway.

7. The female terminal as claimed in accordance with claim 1 wherein the sidewalls rotate along an axis parallel to the direction of insertion of the male terminal in the passageway.

8. The female terminal as claimed in accordance with claim 1 wherein the flat contacting surfaces of the inwardly projecting contacts are elongated in the direction of insertion of the male terminal in the passageway.

9. The female terminal as claimed in accordance with claim 1 wherein a cut is made partially into at least one of the sidewalls of the female terminal to control the flexing of the sidewall when the male terminal is inserted into the passageway.